

Appendix A
Sturgeon Movement Data

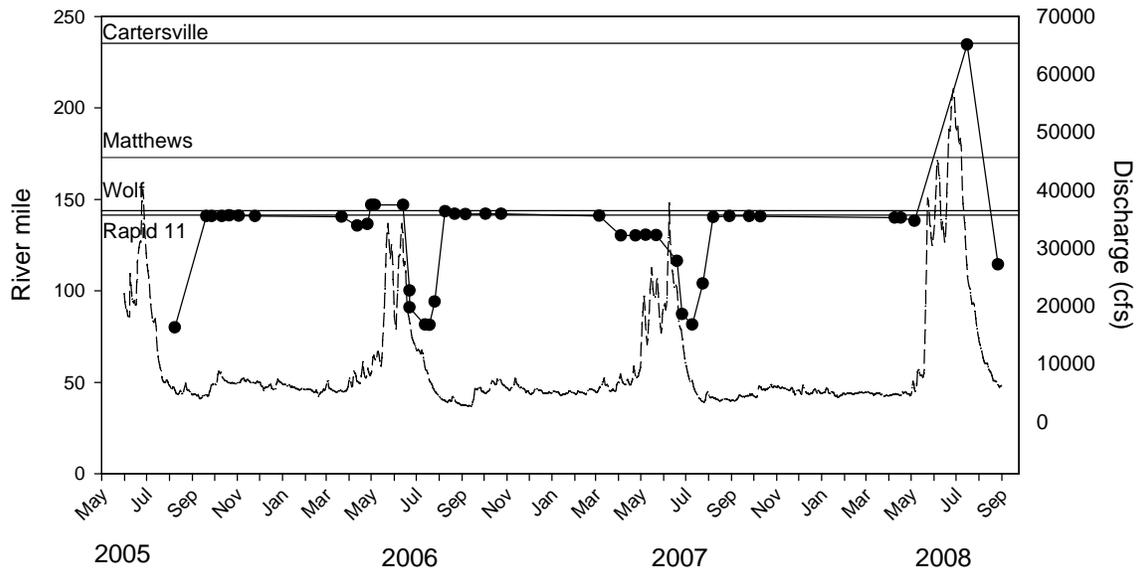


Figure A-1. Movements of shovelnose sturgeon number 420-11 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

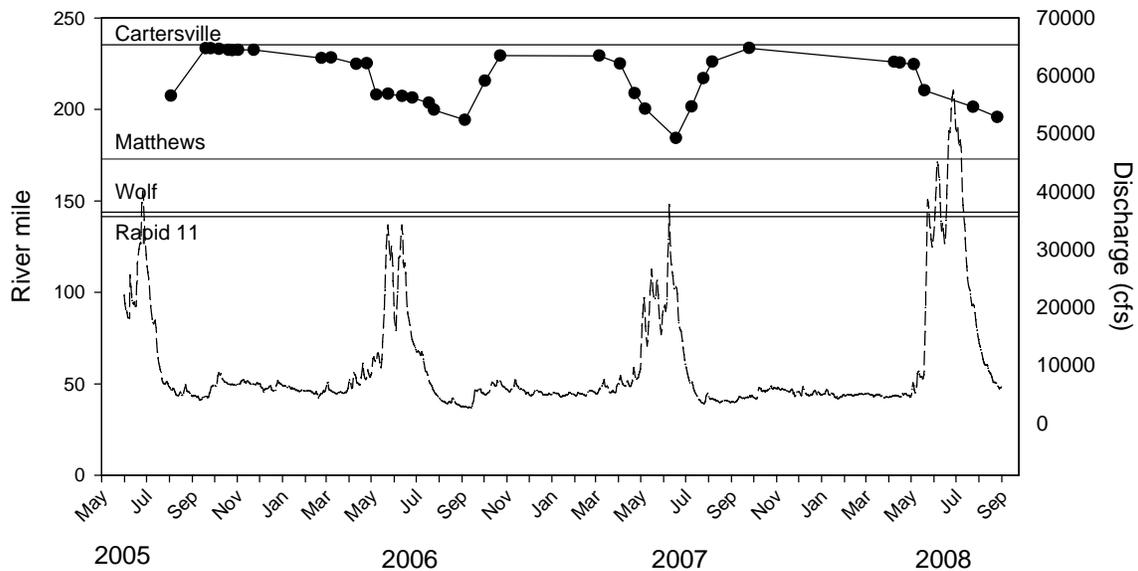


Figure A-2. Movements of shovelnose sturgeon number 420-21 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

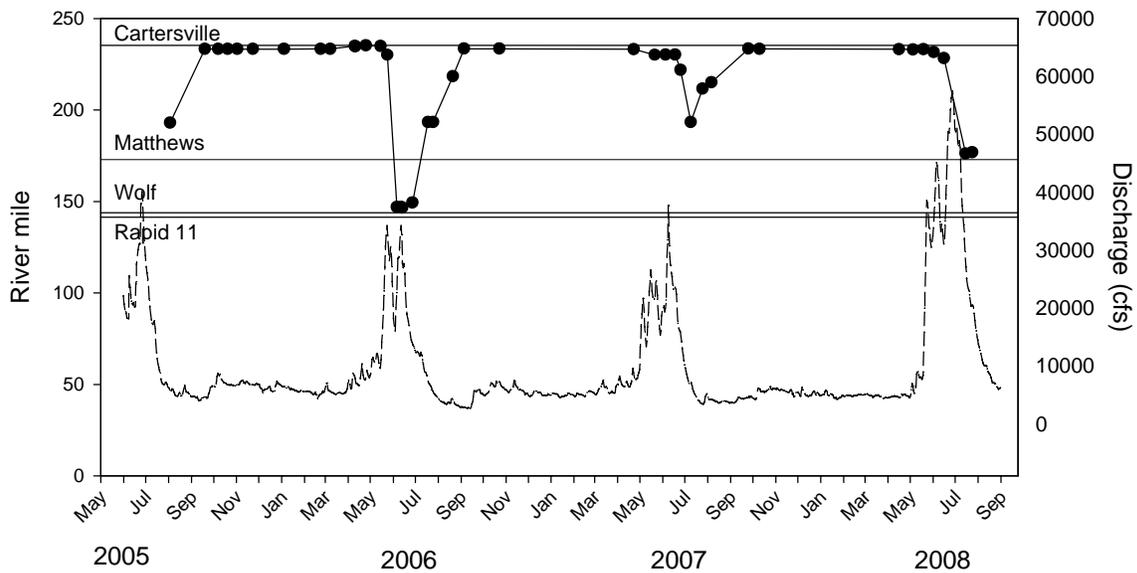


Figure A-3. Movements of shovelnose sturgeon number 420-27 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

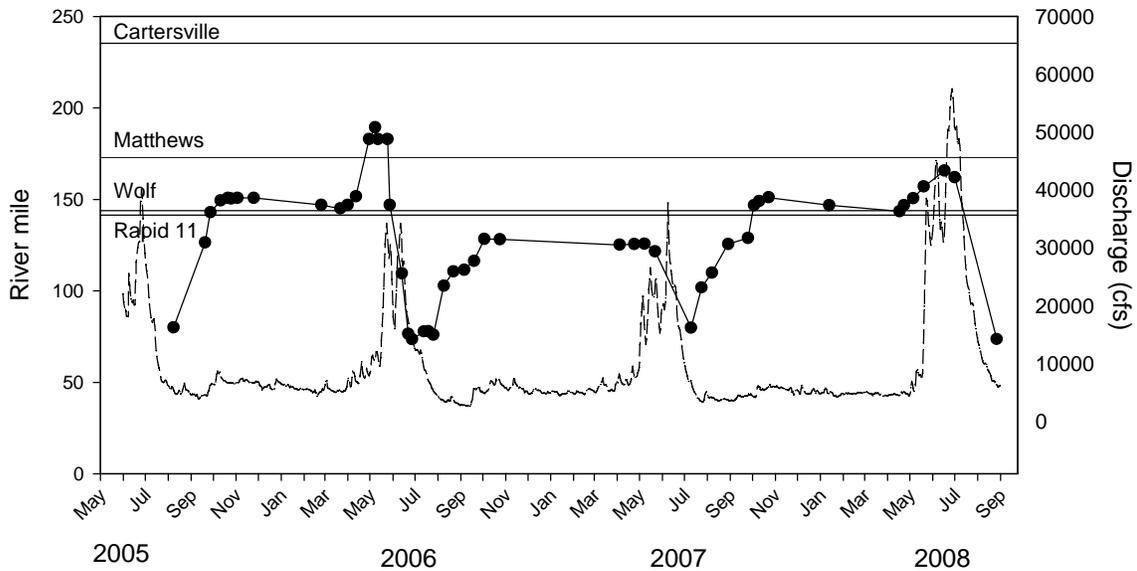


Figure A-4. Movements of shovelnose sturgeon number 420-30 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

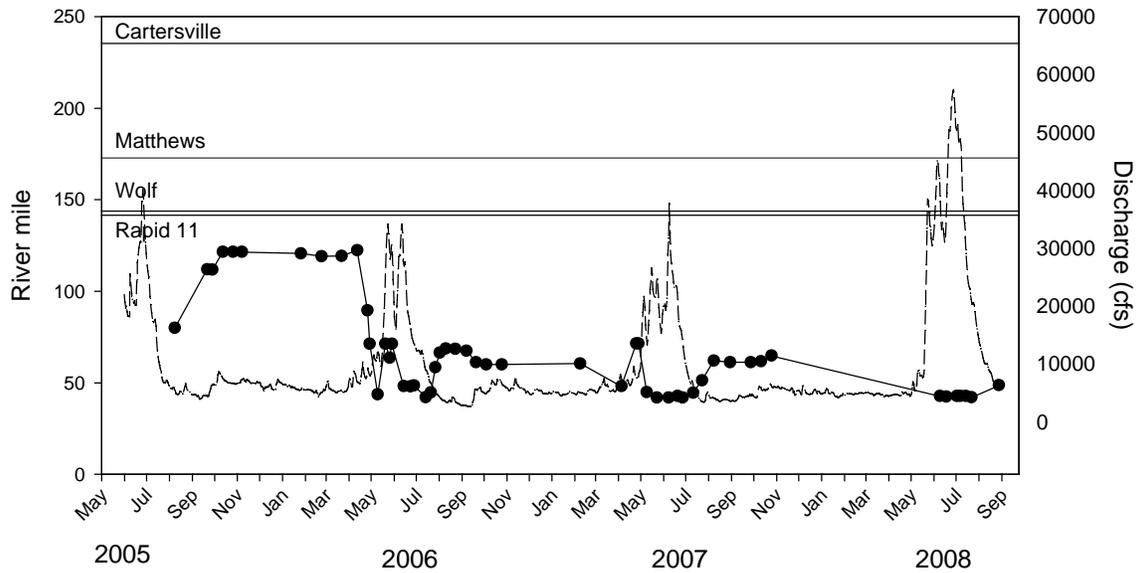


Figure A-5. Movements of shovelnose sturgeon number 420-31 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

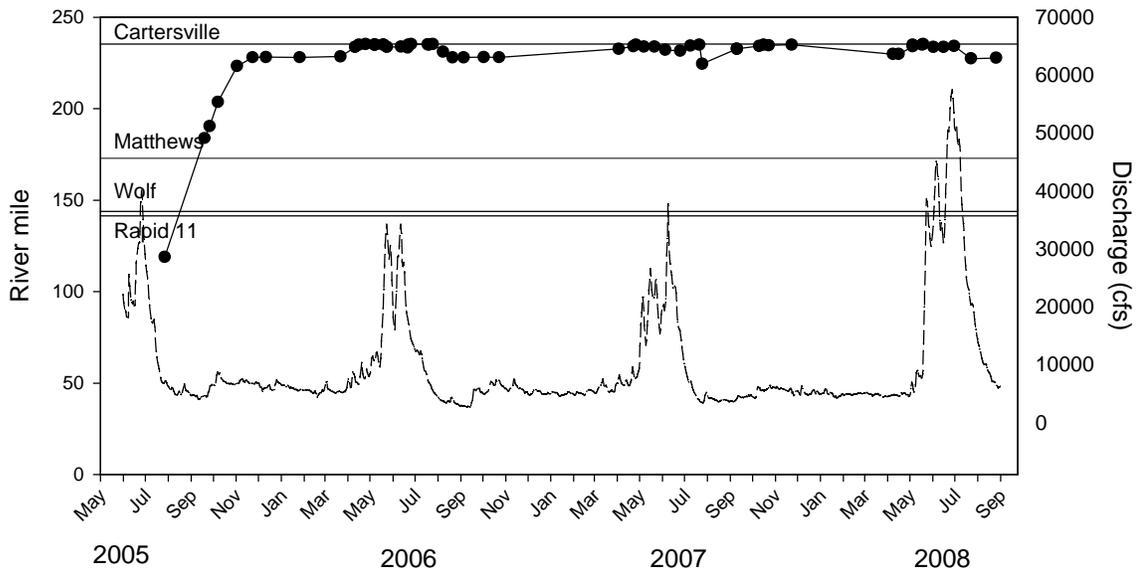


Figure A-6. Movements of shovelnose sturgeon number 420-47 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

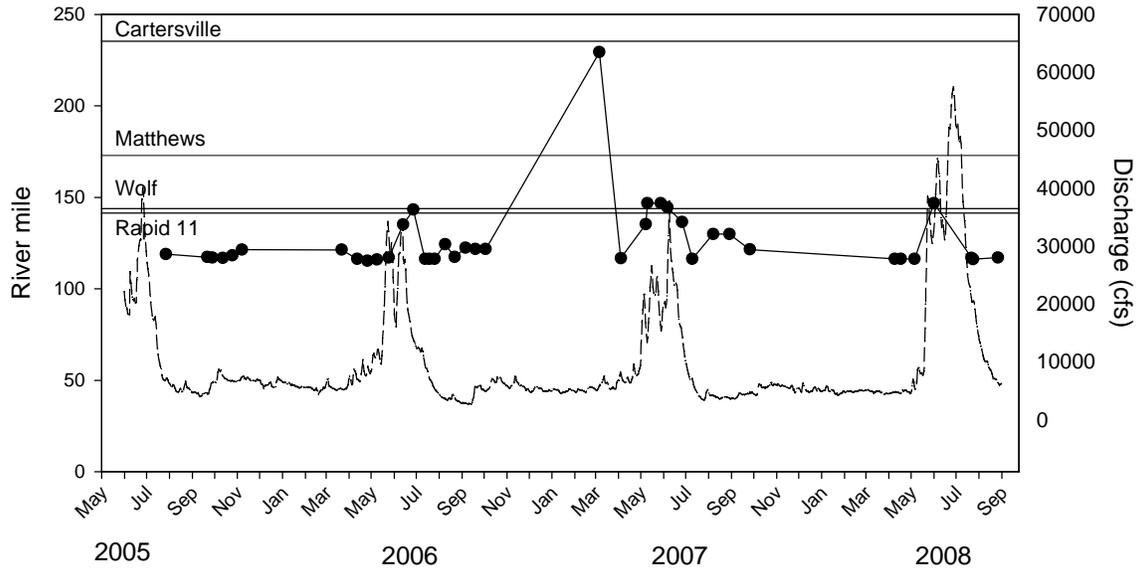


Figure A-7. Movements of shovelnose sturgeon number 420-48 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

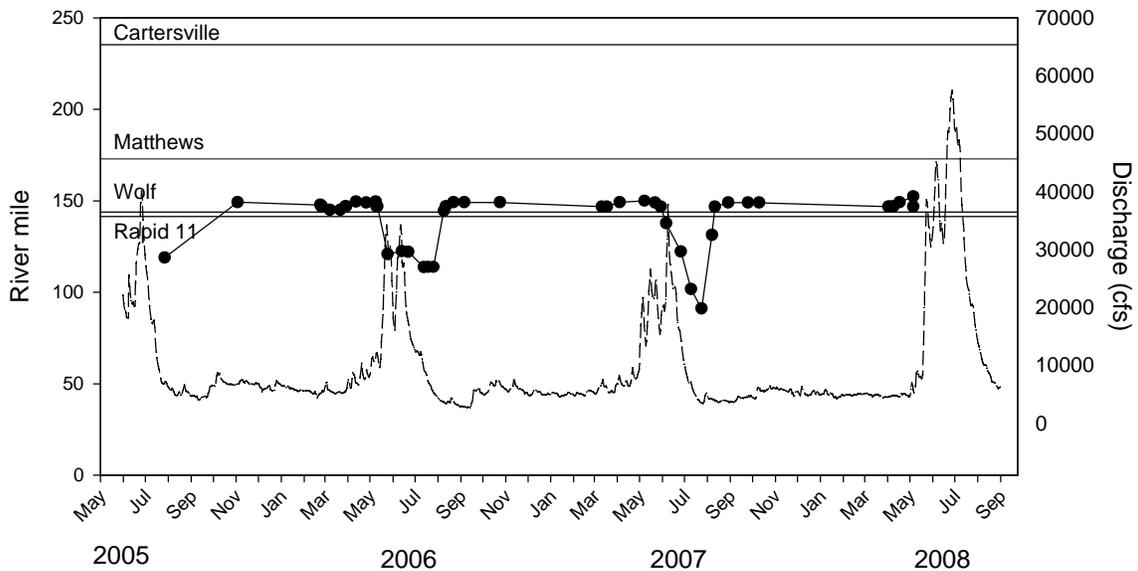


Figure A-8. Movements of shovelnose sturgeon number 420-50 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

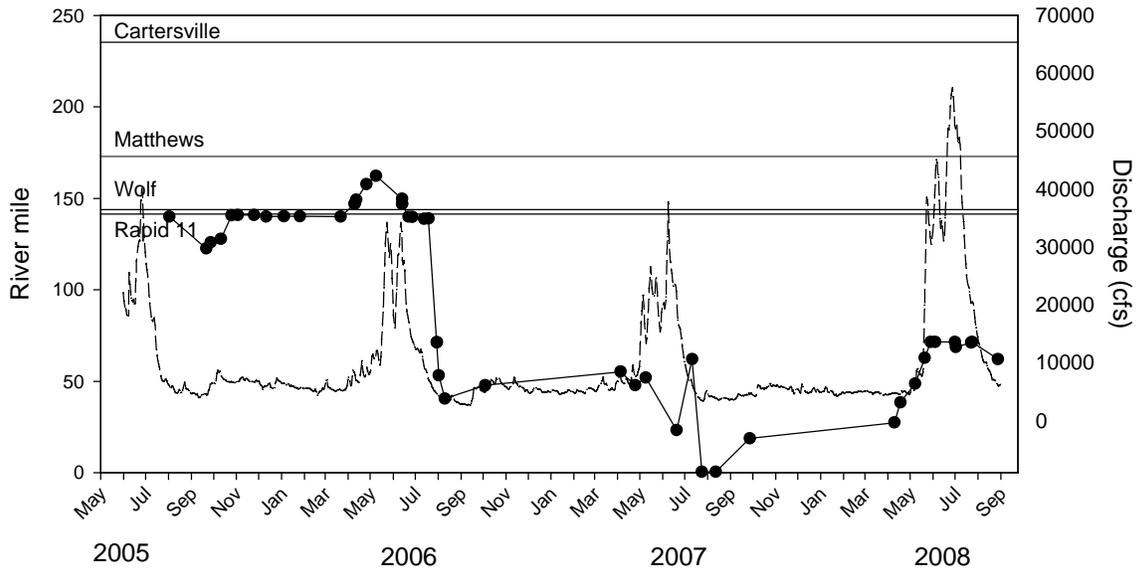


Figure A-9. Movements of shovelnose sturgeon number 420-53 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

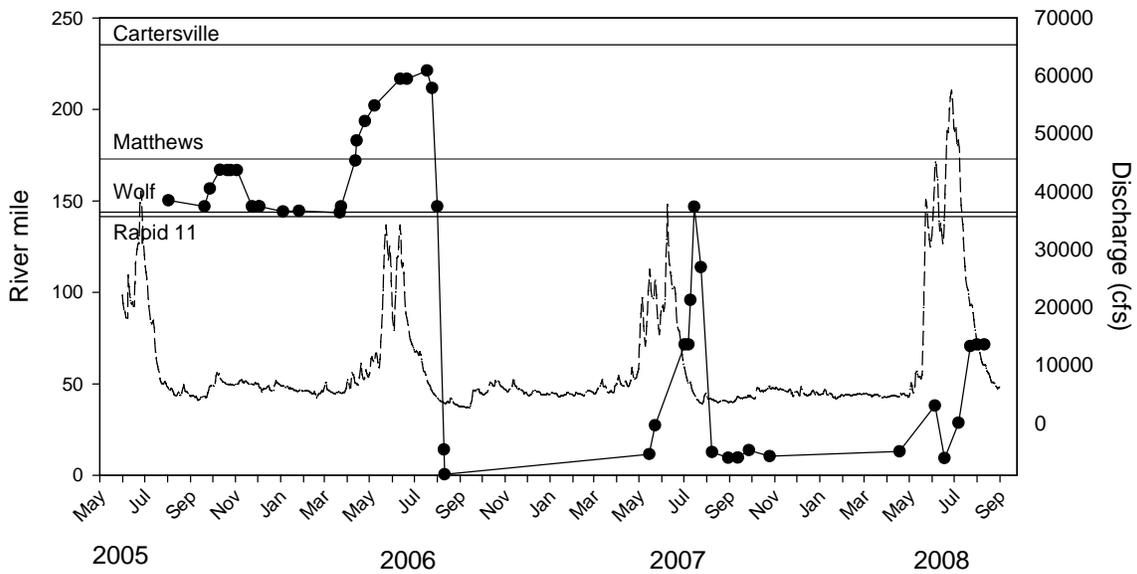


Figure A-10. Movements of shovelnose sturgeon number 420-54 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

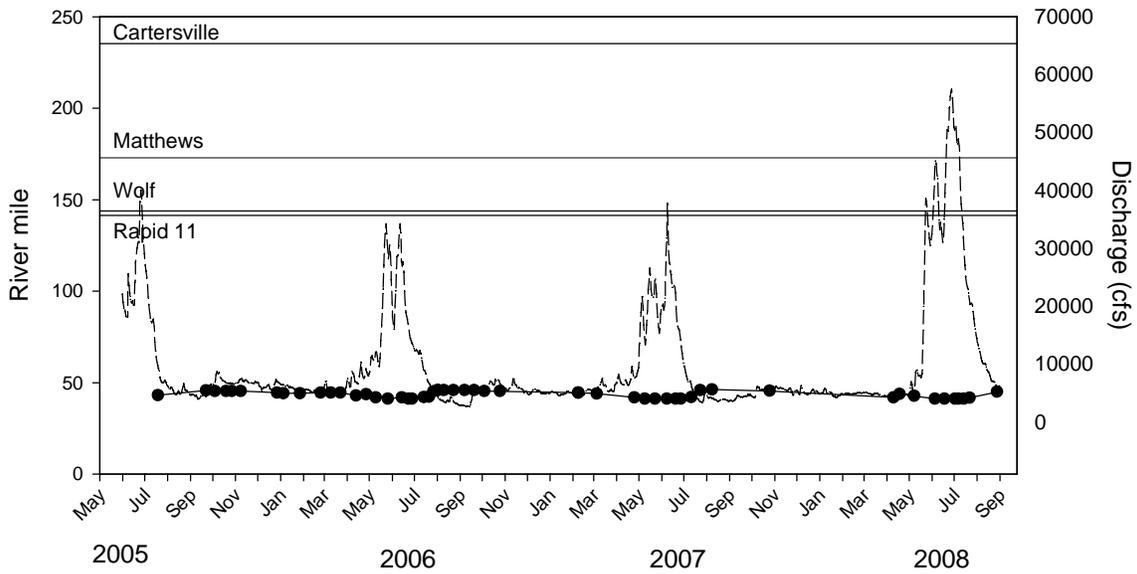


Figure A-11. Movements of shovelnose sturgeon number 420-59 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

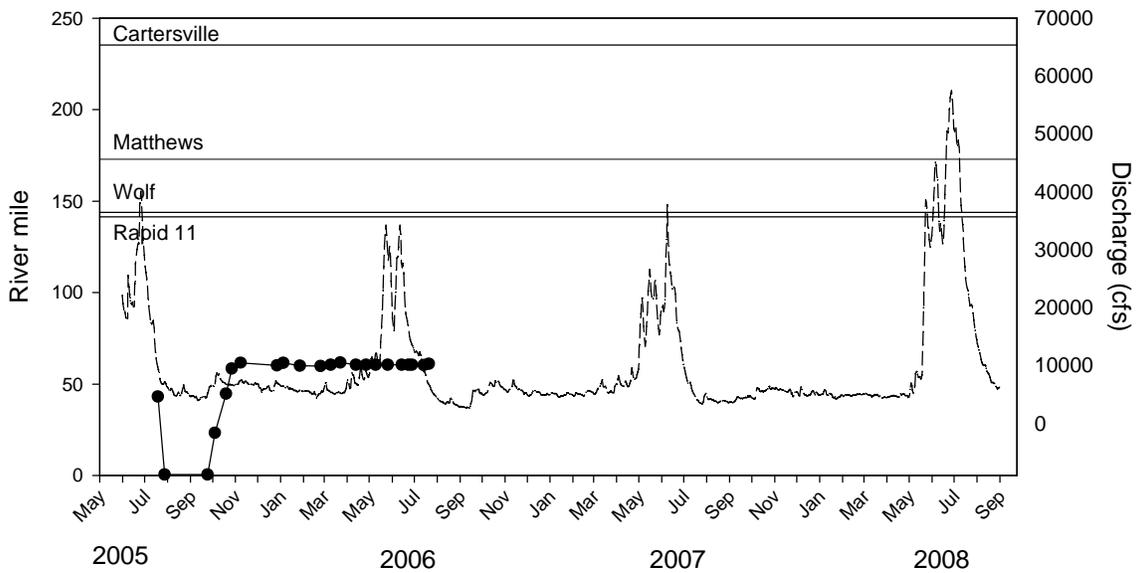


Figure A-12. Movements of shovelnose sturgeon number 420-61 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

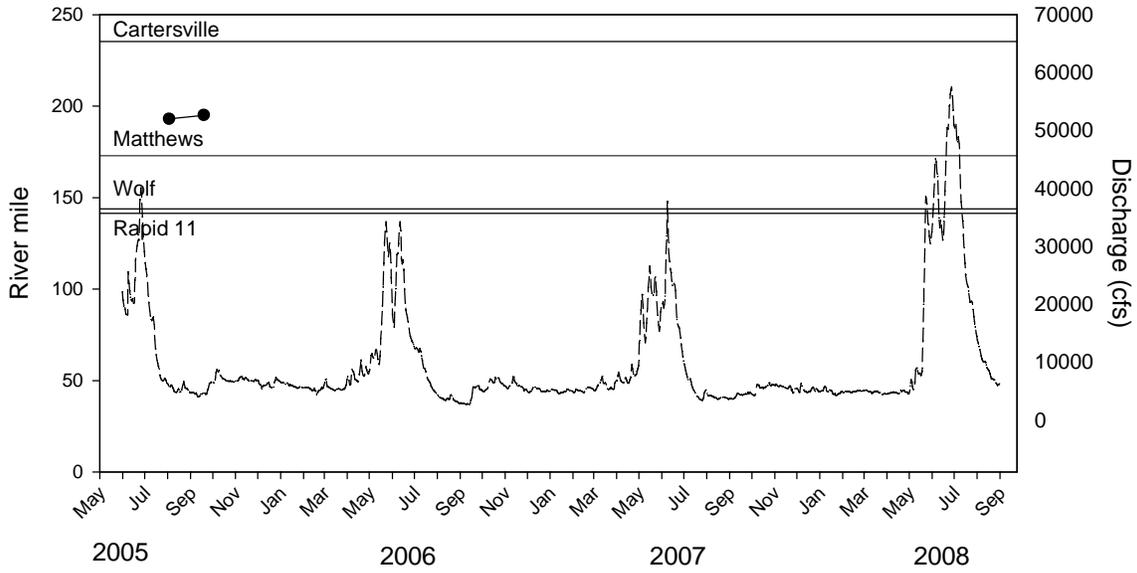


Figure A-13. Movements of shovelnose sturgeon number 420-67 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

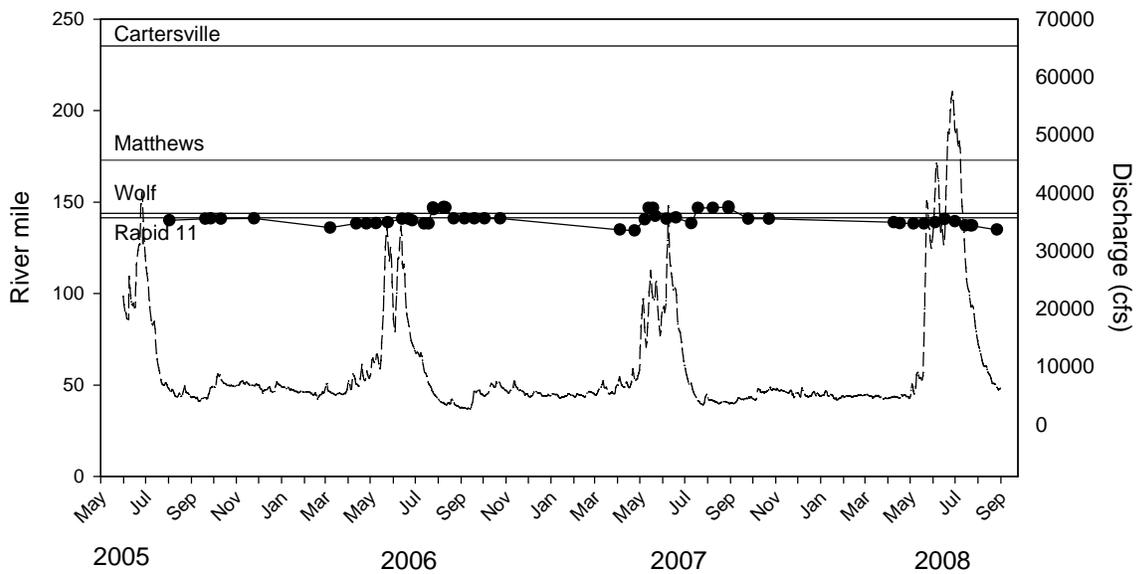


Figure A-14. Movements of shovelnose sturgeon number 420-79 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

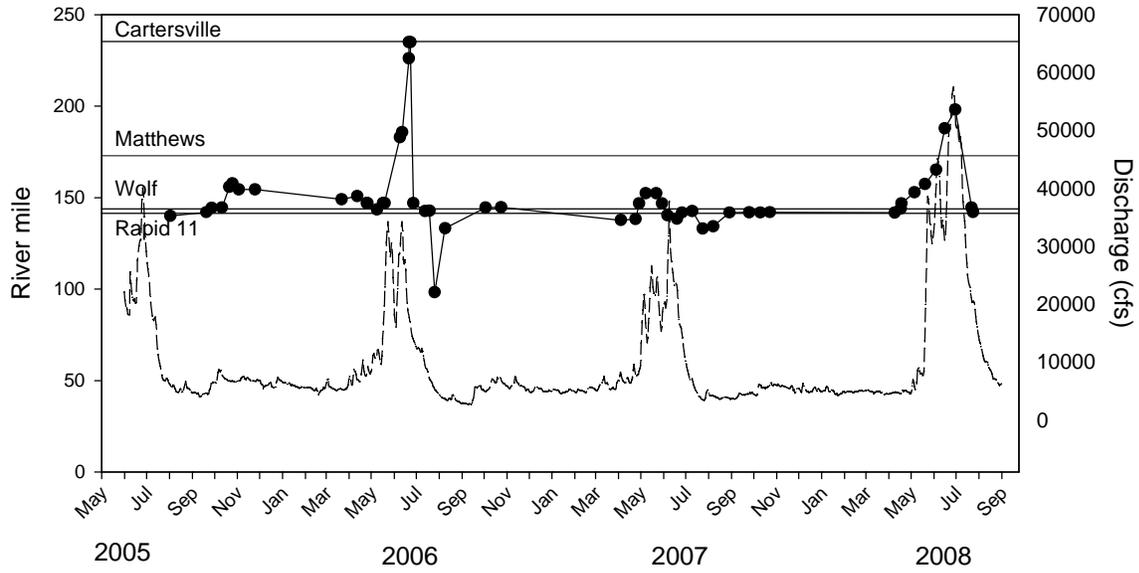


Figure A-15. Movements of shovelnose sturgeon number 420-80 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

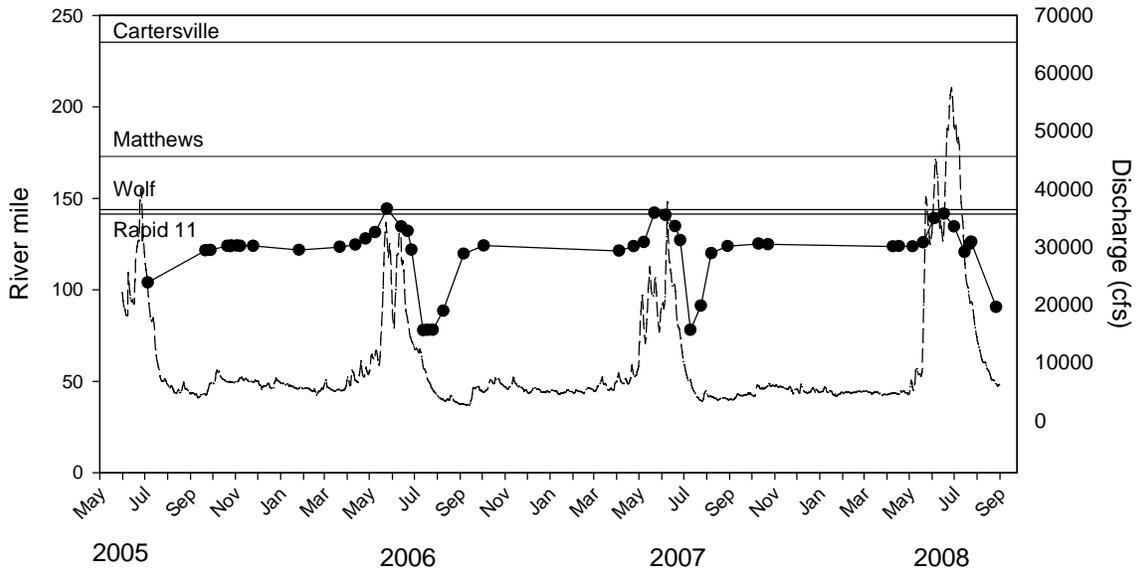


Figure A-16. Movements of shovelnose sturgeon number 480-16 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

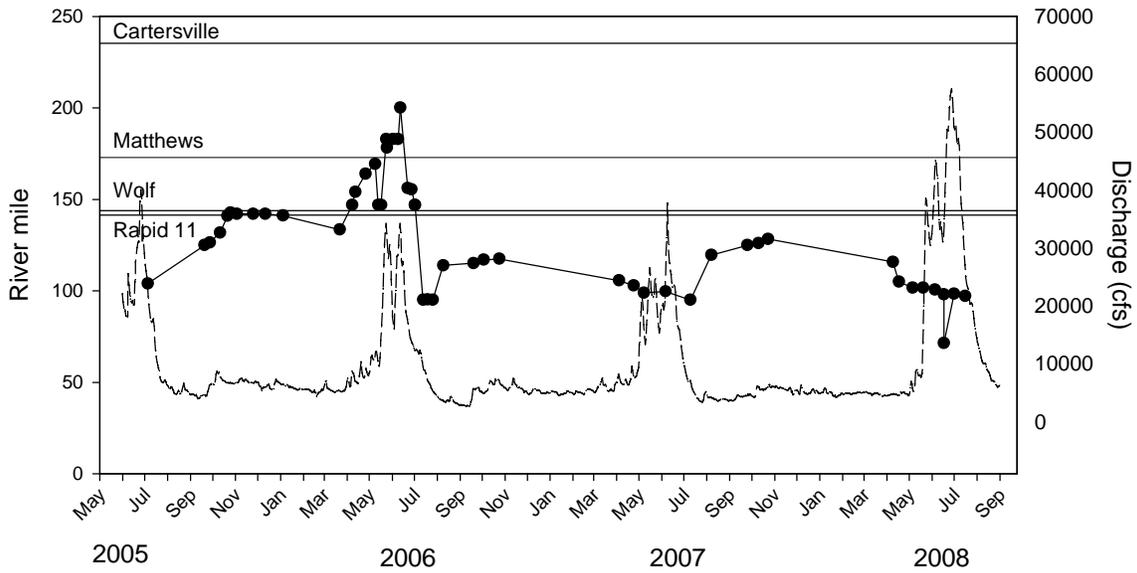


Figure A-17. Movements of shovelnose sturgeon number 480-17 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

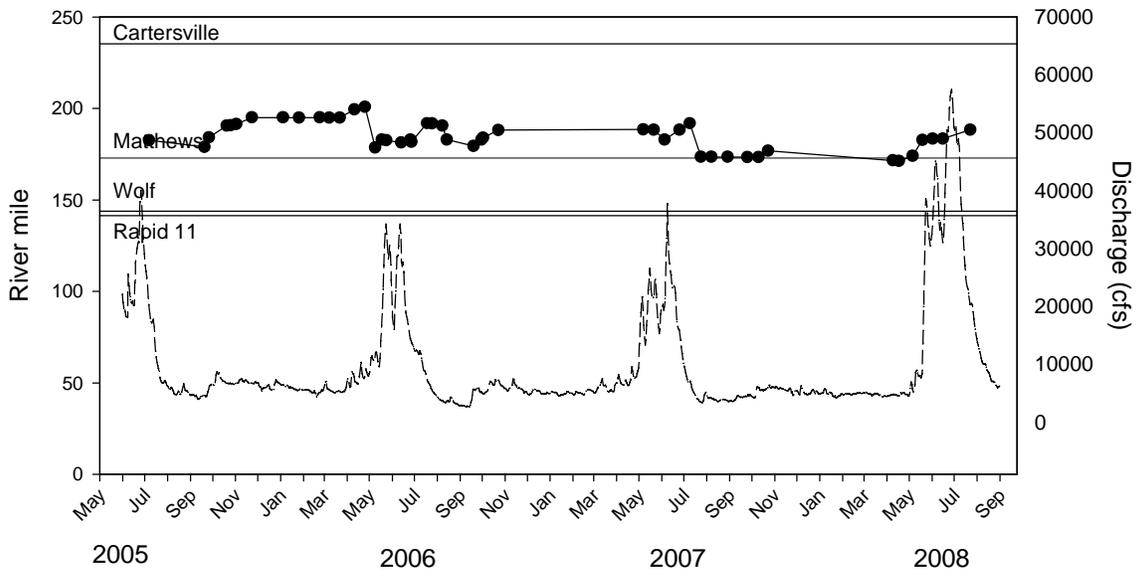


Figure A-18. Movements of shovelnose sturgeon number 480-20 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

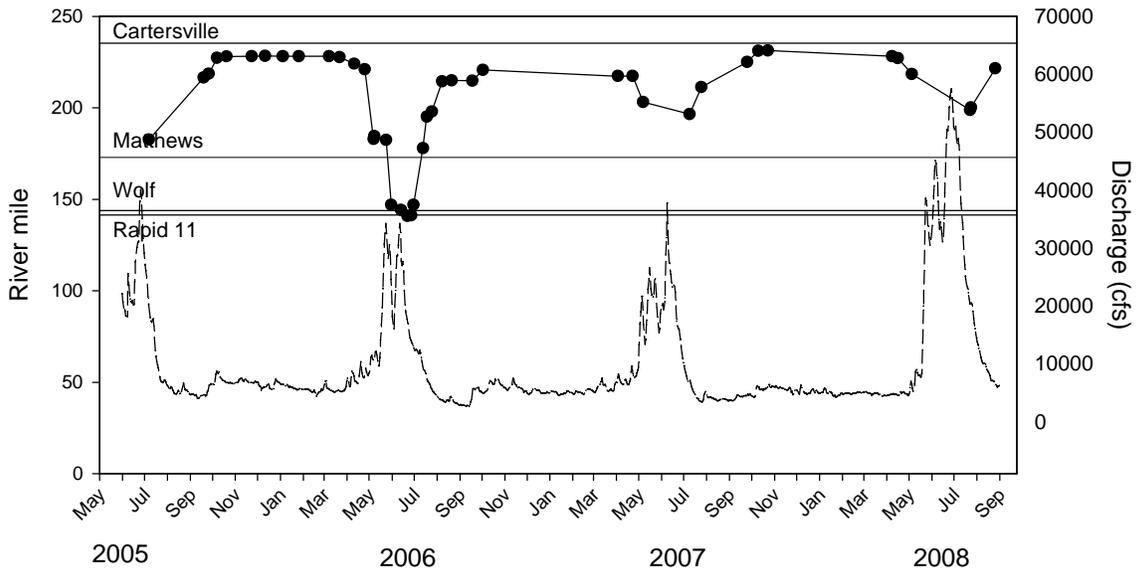


Figure A-19. Movements of shovelnose sturgeon number 480-21 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Mathews Rapid, Wolf Rapid, and Rapid 11.

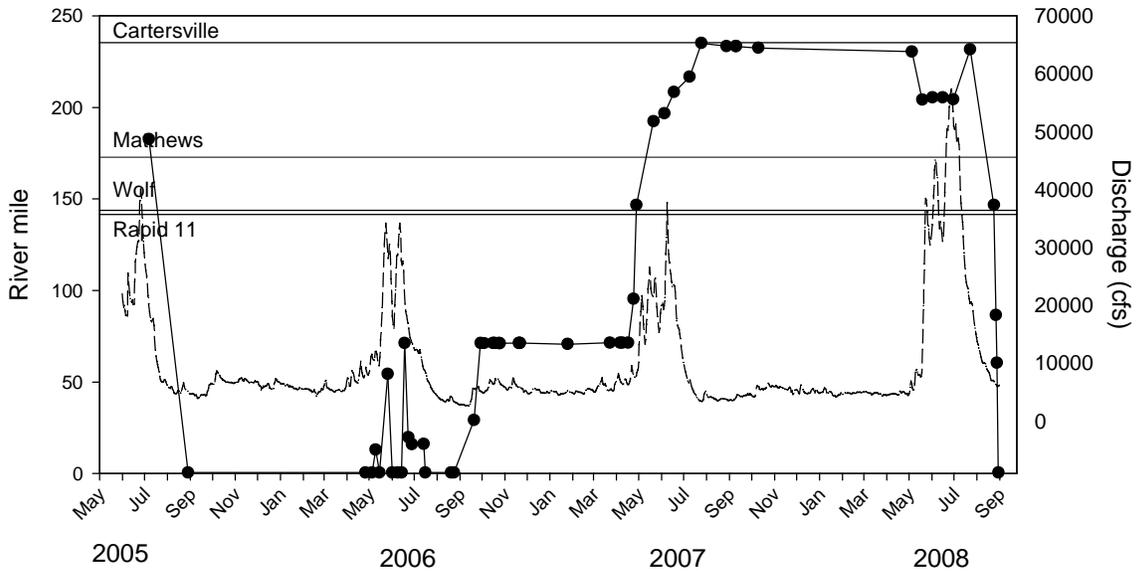


Figure A-20. Movements of shovelnose sturgeon number 480-25 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Mathews Rapid, Wolf Rapid, and Rapid 11.

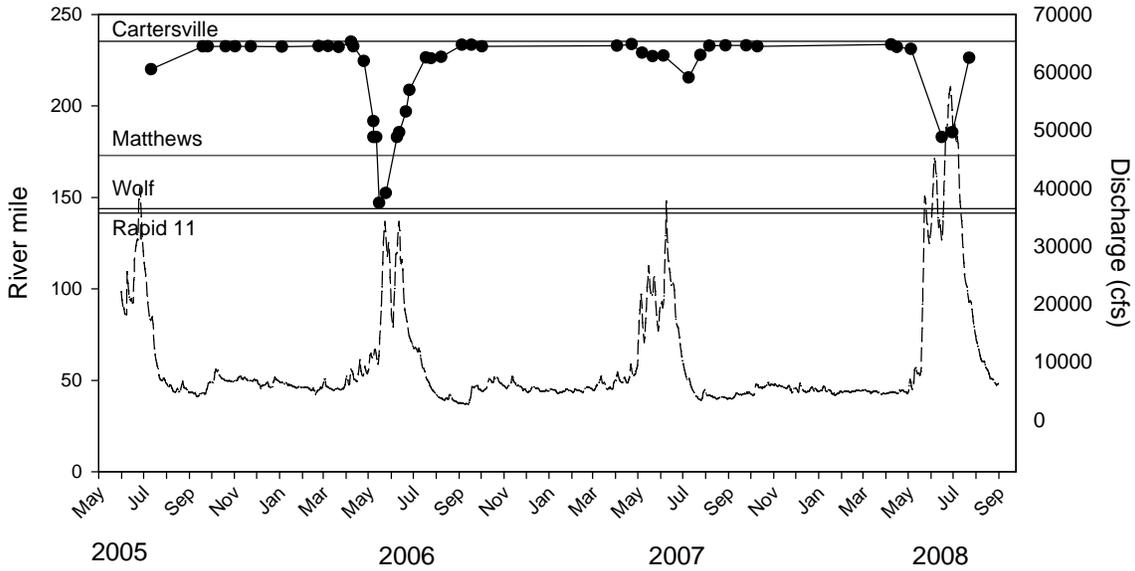


Figure A-21. Movements of shovelnose sturgeon number 480-29 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

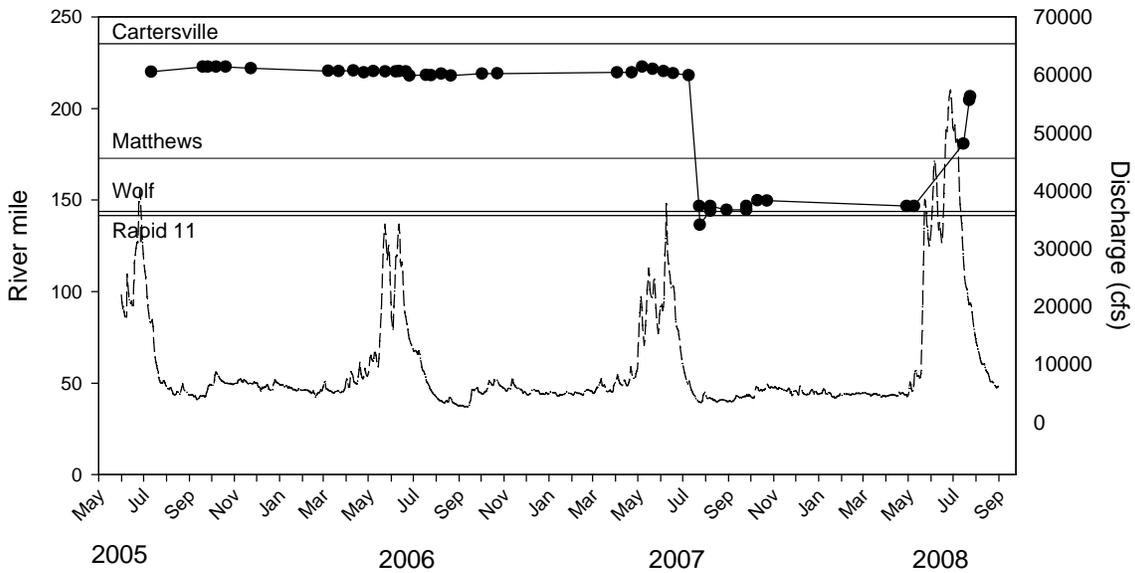


Figure A-22. Movements of shovelnose sturgeon number 480-33 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

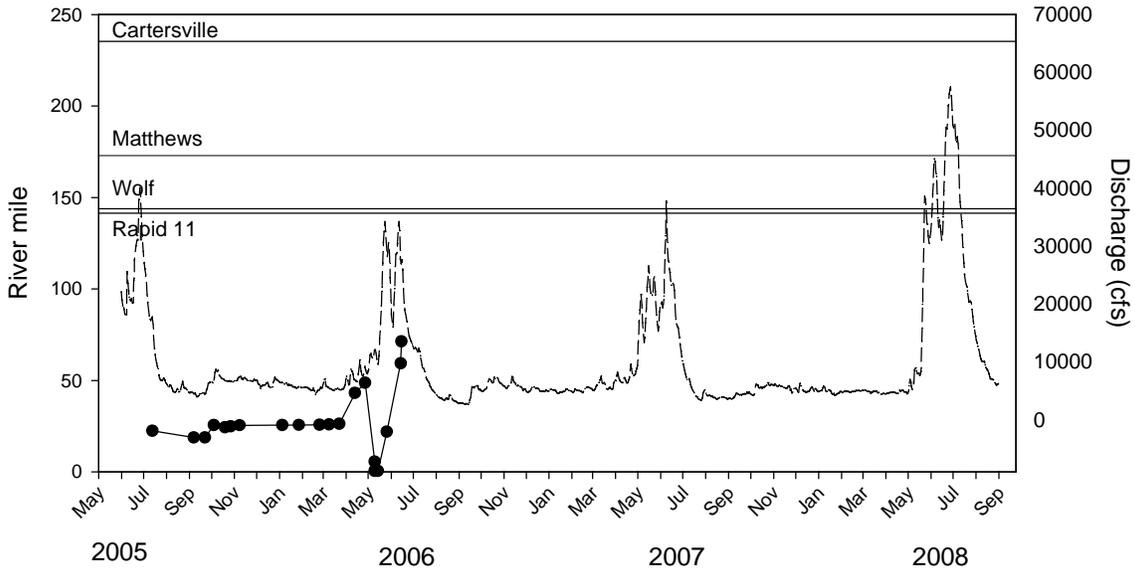


Figure A-23. Movements of shovelnose sturgeon number 480-37 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

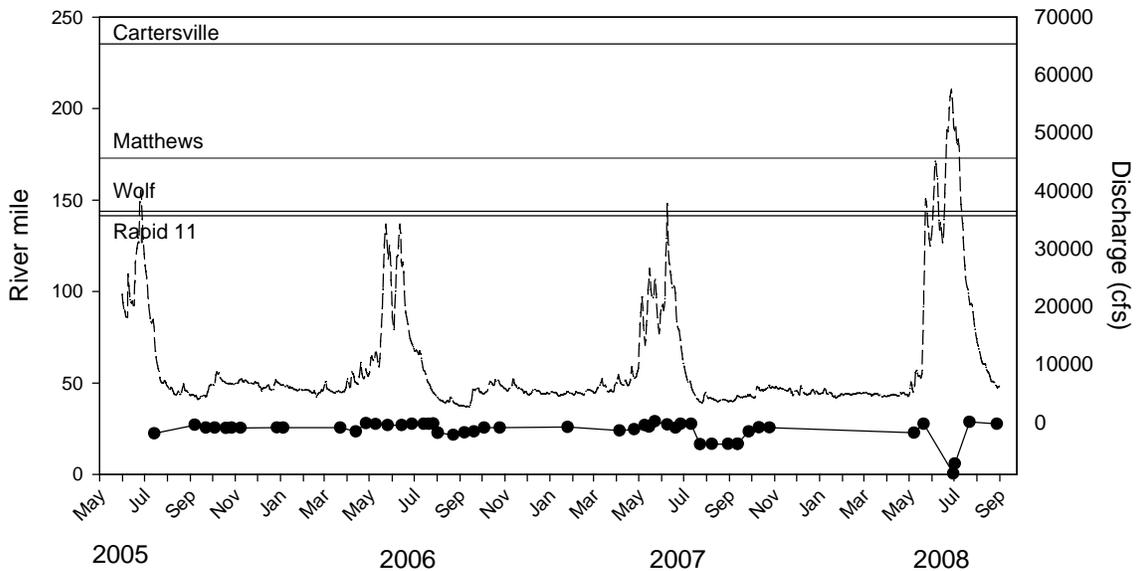


Figure A-24. Movements of shovelnose sturgeon number 480-39 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

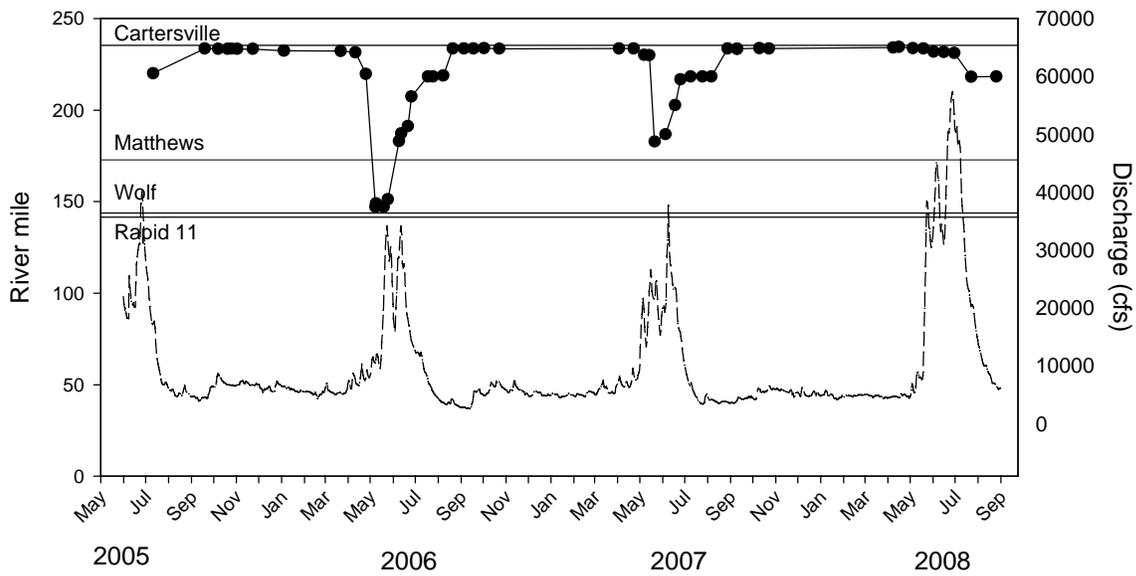


Figure A-25. Movements of shovelnose sturgeon number 480-41 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

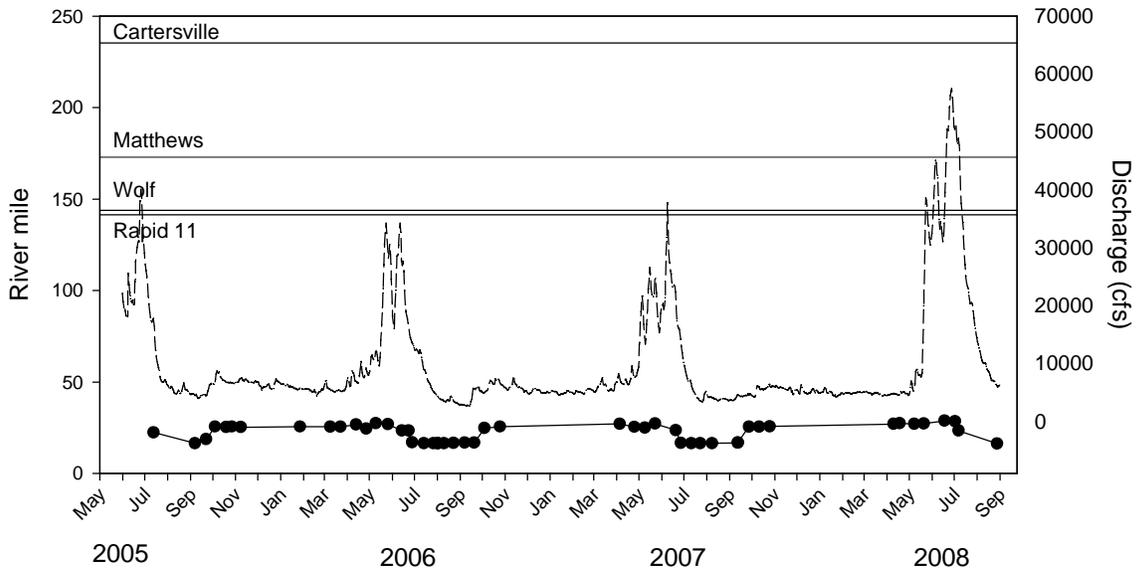


Figure A-26. Movements of shovelnose sturgeon number 480-44 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

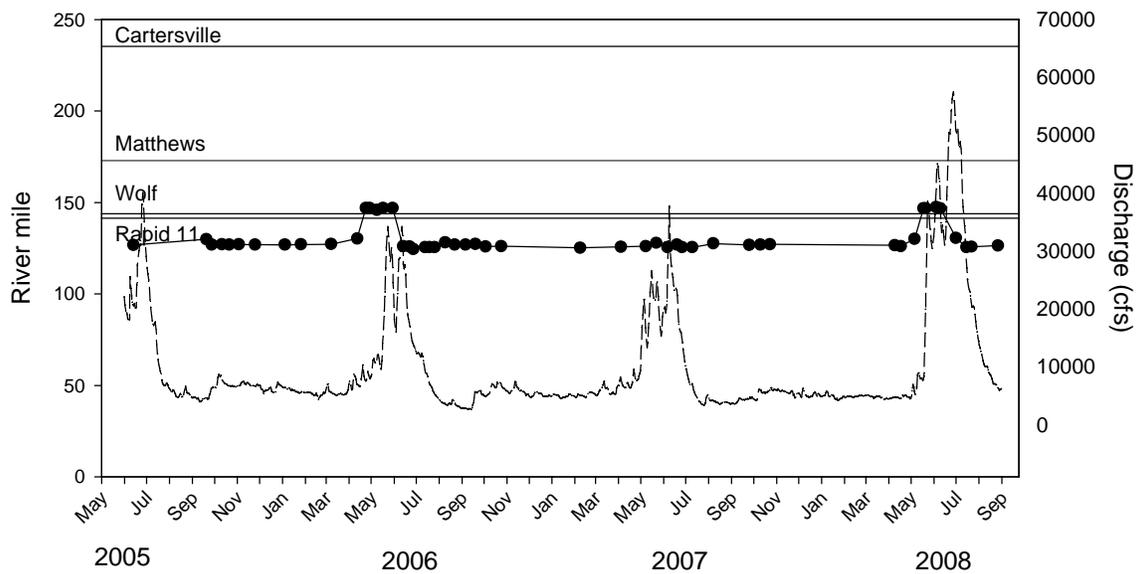


Figure A-27. Movements of shovelnose sturgeon number 480-50 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

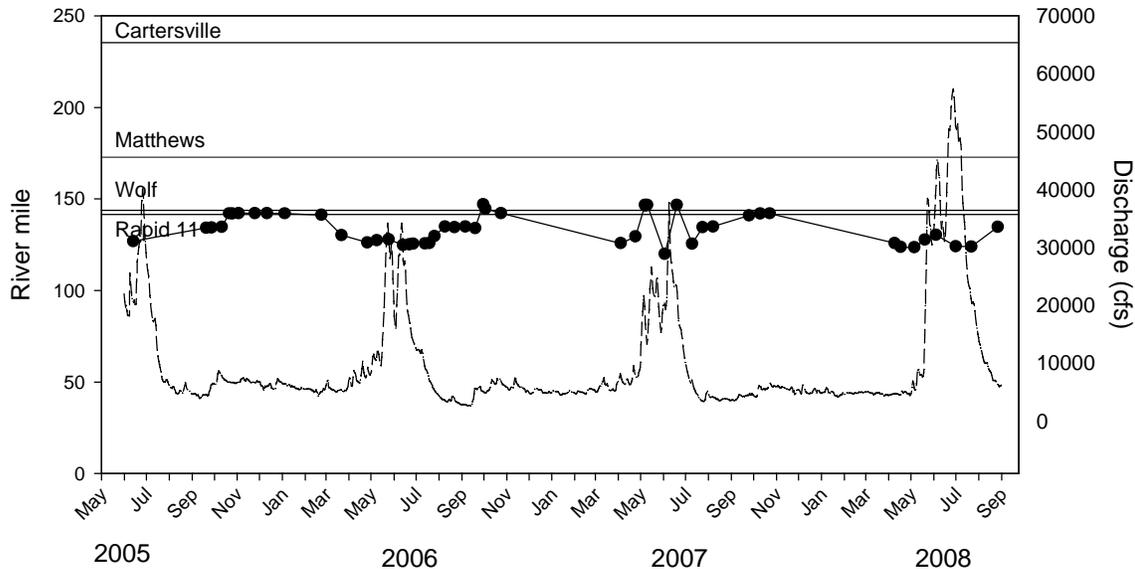


Figure A-28. Movements of shovelnose sturgeon number 480-51 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

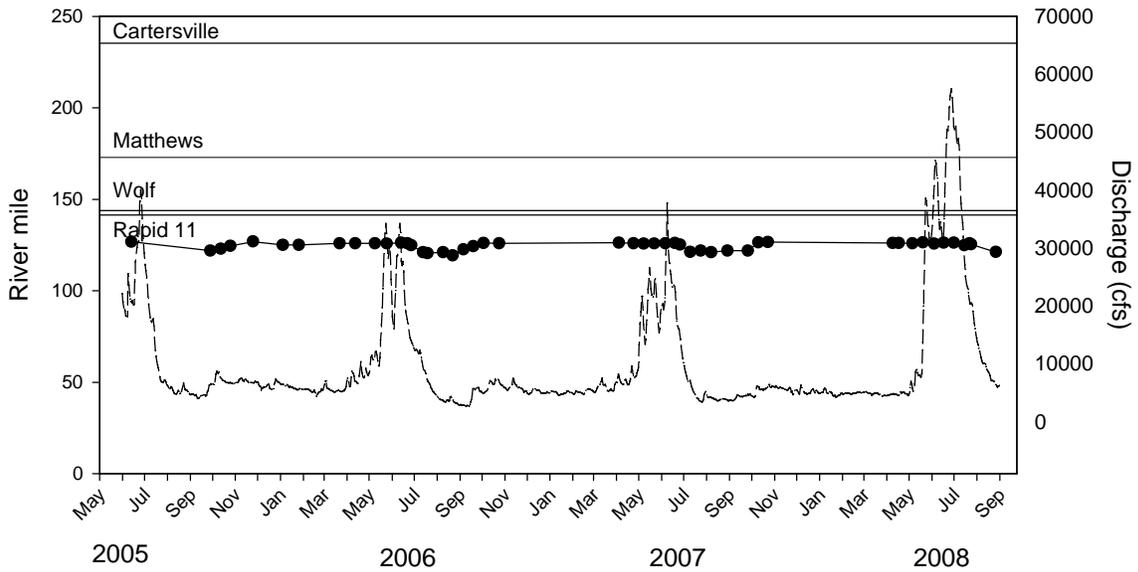


Figure A-29. Movements of shovelnose sturgeon number 480-52 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

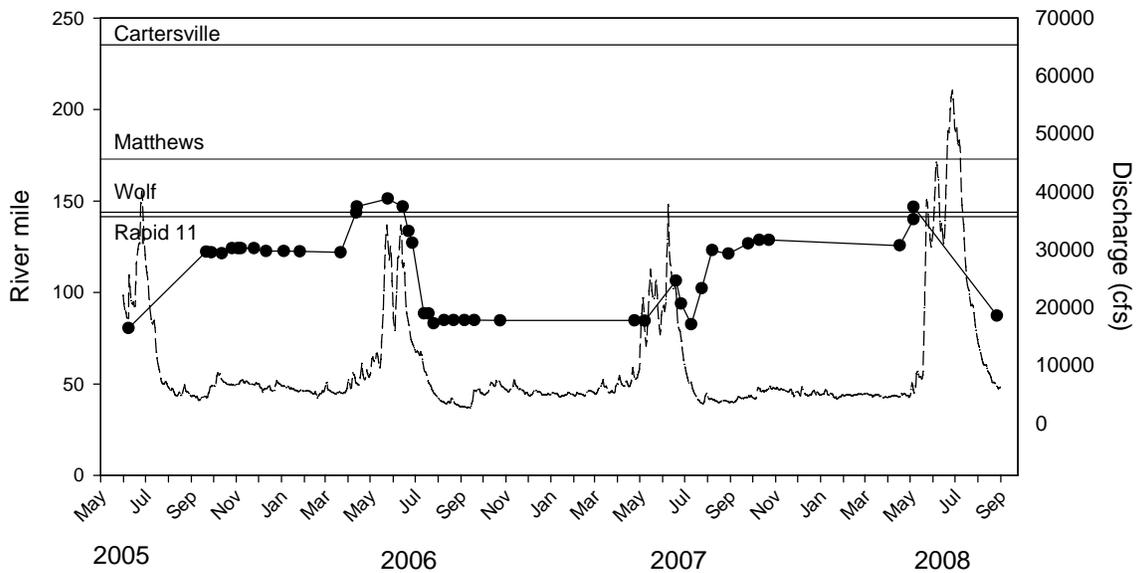


Figure A-30. Movements of shovelnose sturgeon number 75 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

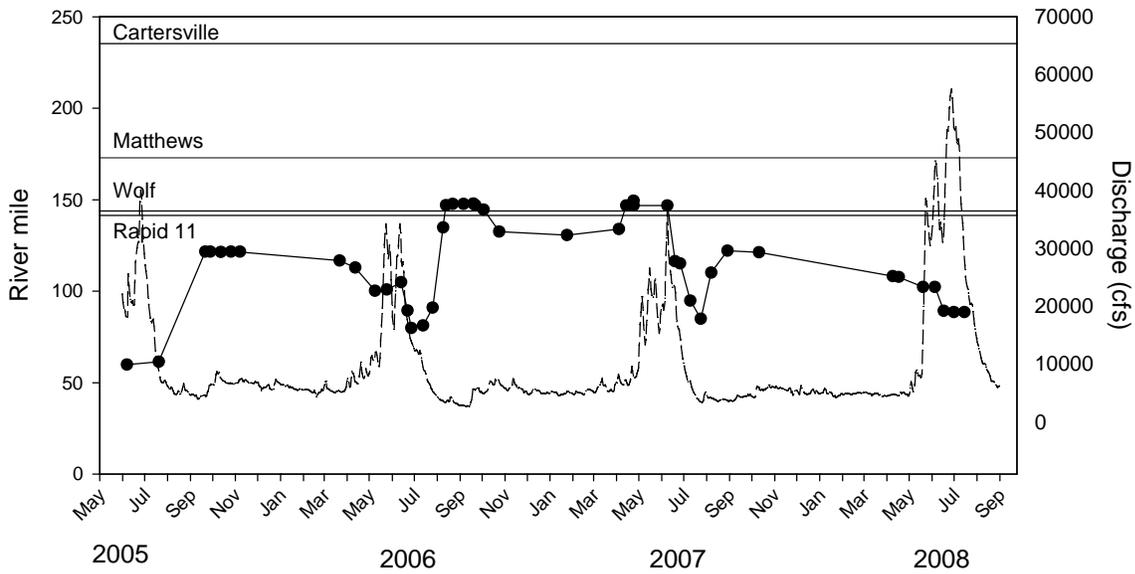


Figure A-31. Movements of shovelnose sturgeon number 480-57 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

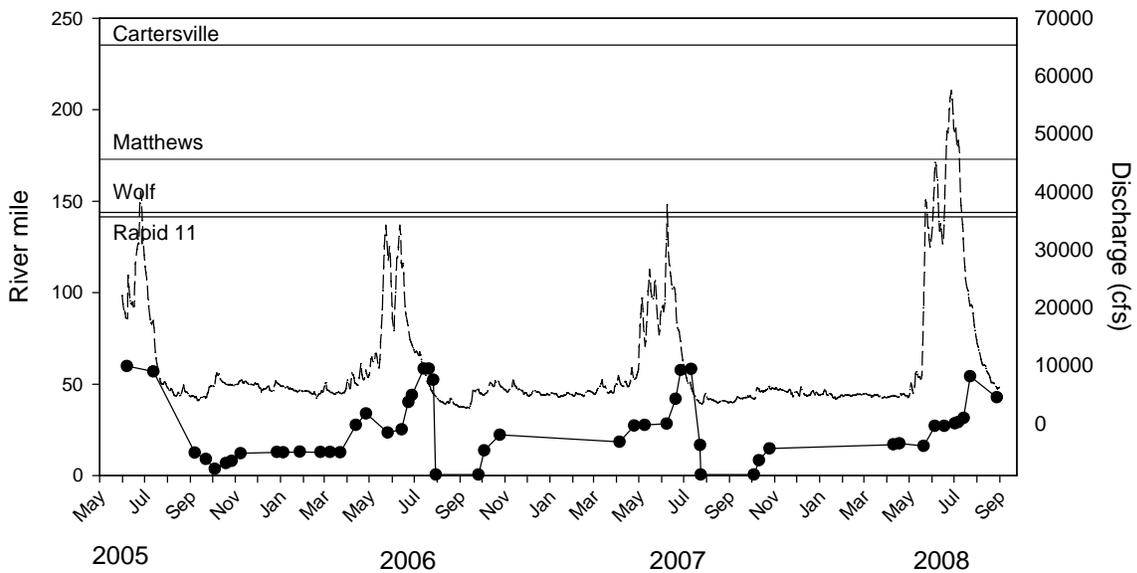


Figure A-32. Movements of shovelnose sturgeon number 480-60 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

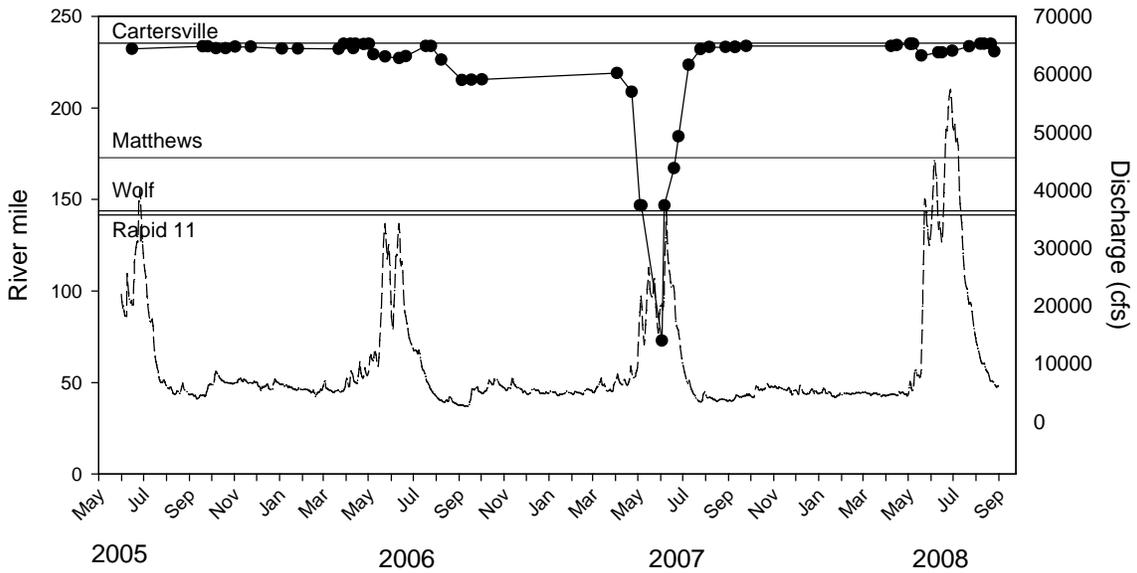


Figure A-33. Movements of shovelnose sturgeon number 480-66 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

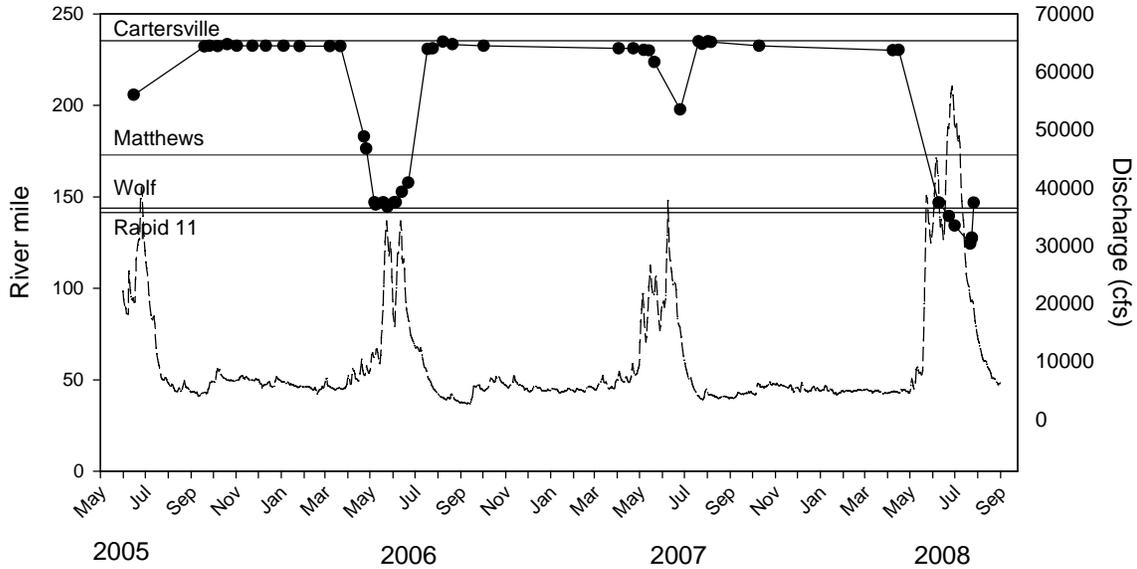


Figure A-34. Movements of shovelnose sturgeon number 480-70 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

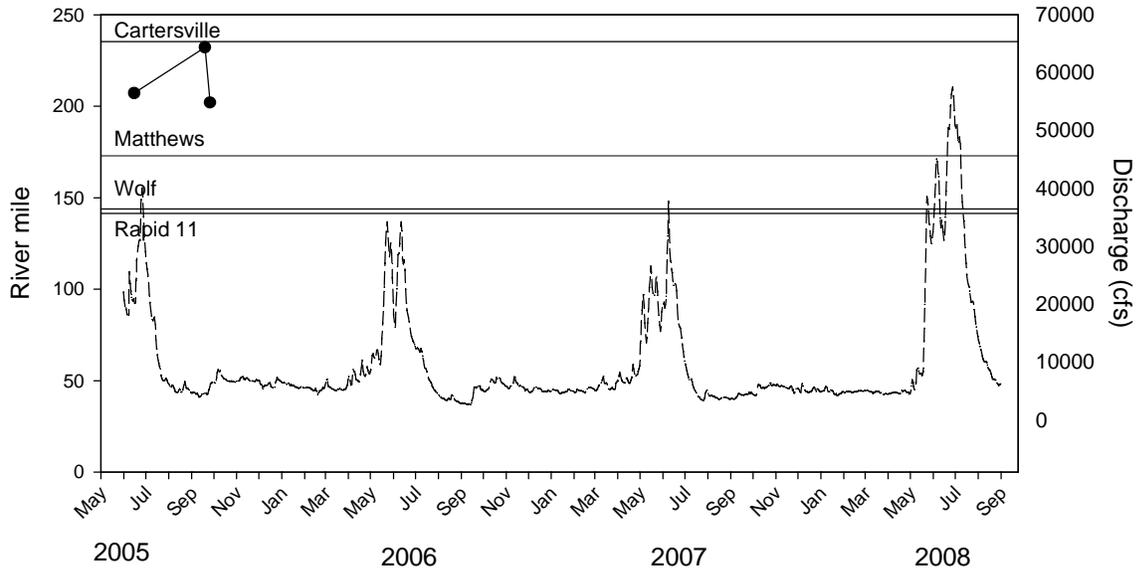


Figure A-35. Movements of shovelnose sturgeon number 480-72 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

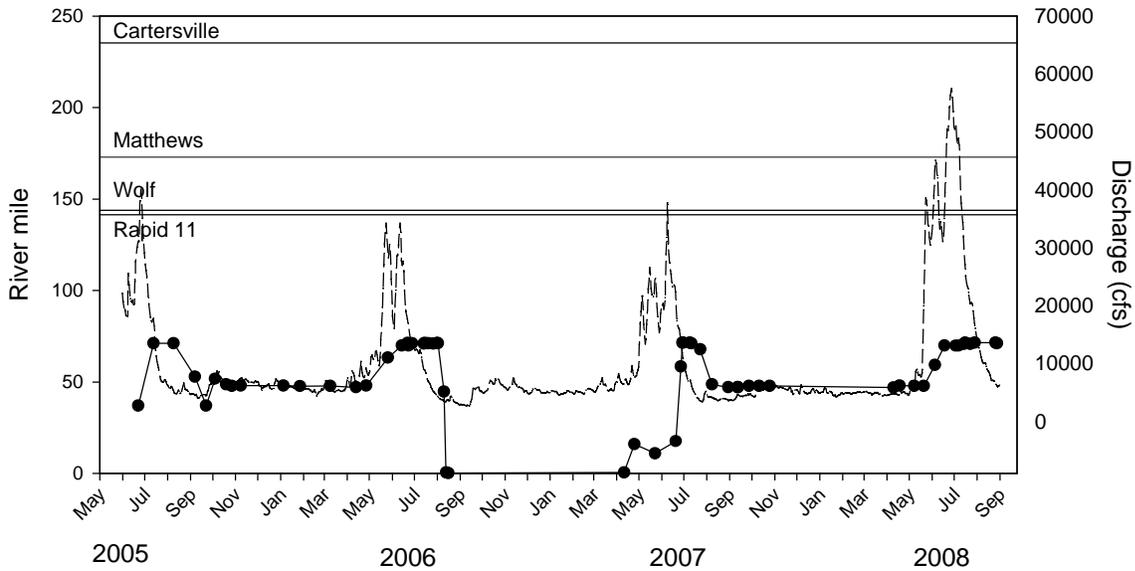


Figure A-36. Movements of shovelnose sturgeon number 480-76 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.

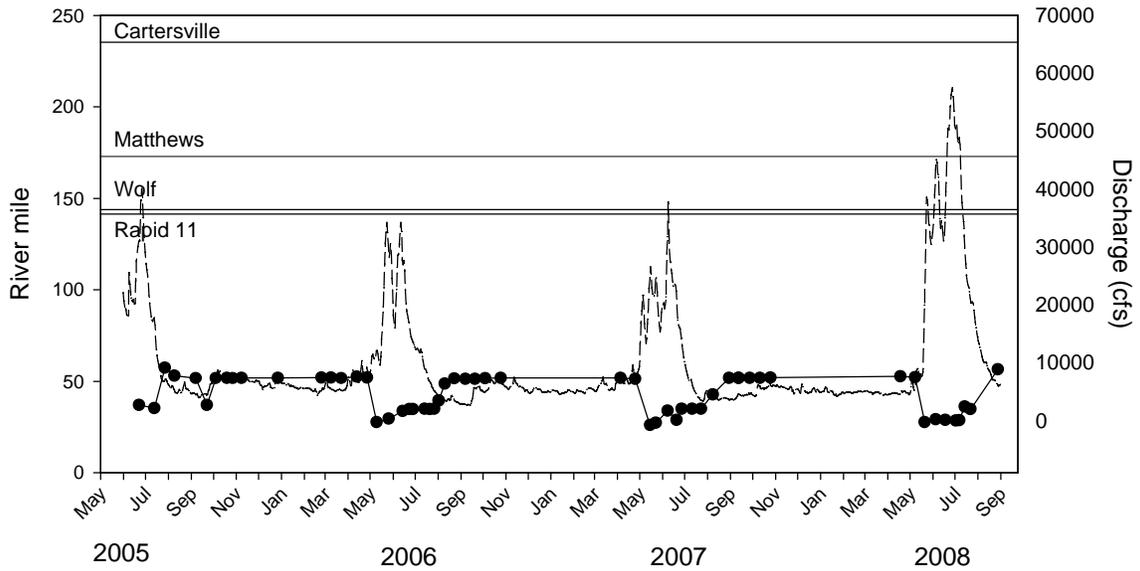


Figure A-37. Movements of shovelnose sturgeon number 480-80 in the Yellowstone River, 2005-2008. Sturgeon locations are indicated with black dots connected by a solid line; discharge at Miles City is displayed as a dashed line. Horizontal reference lines indicate the locations of Cartersville Dam and Matthews Rapid, Wolf Rapid, and Rapid 11.